



MULTISPECTRAL SOLUTIONS, INC.

**Response to FCC Notice of Inquiry
ET Docket No. 98-153
"Revision of Part 15 of the Commission's Rules Regarding
Ultra-Wideband Transmission Systems."**

**Submitted to the
Federal Communications Commission, Washington, DC**

**By
Multispectral Solutions, Inc.
Gaithersburg, MD**

5 April 2000

At his 30 March 2000 "Briefing to Industry Leaders" on the Wireless Innovations in Communications Initiative (WICI), Assistant Secretary of Commerce for Communications and Information and National Telecommunications and Information Administration (NTIA) Administrator, the Honorable Gregory L. Rohde stated the need to

(a) "identify new innovative wireless technologies such as software radios, ultra wideband and narrowband;" and,

(b) to "create an environment to foster innovation".

WICI was initiated to provide "a mechanism for senior government communications managers to meet with developers of communications technologies and determine how the federal government would benefit by the use of such technologies." WICI was established as an *ad hoc* committee under the Interdepartmental Radio Advisory Committee (IRAC) which is "composed of senior experts in the Federal Government who understand their agency's radiocommunication requirements and who can envision the potential application of new technologies."

The Assistant Secretary provided a graphic which illustrated the current use of spectrum by the Federal Government and commercial sectors. He pointed out that 1.4% of available spectrum is reserved for exclusive use by the Federal Government, 5.5% is reserved for exclusive use by the commercial sector, and 93.1% of available spectrum is available on a *shared* basis. In addition, 50% of Federal Government use is in bands below 3.1 GHz; while 40% of commercial use is below 3.1 GHz.

Rohde also stated that "since demands for the spectrum are increasing rapidly by both the public and private sectors, there is an urgent need to ensure that this limited national resource is used in an effective and efficient manner." He went on to state that one of his top priorities was to make sure that the United States "maintain world leadership" in the broad area of communications.

MSSI is very pleased that Secretary Rohde has taken this initiative to further foster innovations in communications technologies. The introduction of new technologies in 'an effective and efficient manner' is a goal that we also share.

MSSI has fought hard to guarantee that ultra wideband technology is introduced into the commercial sector in a manner that sufficiently protects existing spectrum users. As Secretary Rohde illustrated, bands below 3.1 GHz are extremely congested; and this frequency range not only includes critical GPS and safety-of-life frequencies, but also frequencies for rapidly emerging third-generation (3G) wireless applications and others. MSSI has always advocated that, until further independent testing is completed, ultra wideband systems should be limited to operate outside of restricted bands. From Secretary Rohde's remarks at the WICI Briefing to Industry Leaders, FCC approval for the initial implementation of UWB systems above 3.1 GHz would represent an ideal starting point for the introduction of this technology into the commercial marketplace.